

ABSTRACT

HDD YIELD/QUALITY IMPROVEMENT USING CALCULATED FAILURE RATE DERIVED FROM MULTIPLE COMPONENT LEVEL PARAMETERS

A method for improving yields in manufacturing processes includes identifying
5 parameters which affect performance at a subsequent step in the process, collecting data
concerning individual performance parameters, creating a reference scale which
correlates individual parameters with probability of failure at a subsequent step in the
process, testing a manufactured unit to collect performance data concerning two or more
of the individual parameters from a manufactured unit, comparing performance data
10 concerning two or more of the individual parameters from the manufactured unit to the
reference scale to assign probability of failure for each of the single performance
parameters, calculating a Figure of Merit, and utilizing the Figure of Merit to sort or
disposition units.